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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/034,277 | 12/28/2001 | Robert Paul Morris | 2358P/P215 | 9757 |
| 29141 | 7590 | 08/24/2004 | EXAMINER | |
| SAWYER LAW GROUP LLP P O BOX 51418 PALO ALTO, CA 94303 | | | WONG, LESLIE | |
| | | ART UNIT | PAPER NUMBER | |
| | | 2177 | 4 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|------------------------------|------------------------|---------------------|
| | 10/034,277 | MORRIS ET AL. |
| Examiner | Art Unit | |
| Leslie Wong | 2177 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 28 December 2001.
2a) This action is FINAL. 2b) This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-43 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-8, 10-23, 25-37 and 39-43 is/are rejected.

7) Claim(s) 9, 24 and 38 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 28 December 2001 is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/28Dec01.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. Applicants' Information Disclosure Statement, filed 28 December 2001, has been received, entered into the record, and considered. See attached form PTO-1449.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because the word "comprising" on line 3 incorporates legal phraseology from claim language. Correction is required. See MPEP § 608.01(b).

Claim 31 is objected to because of the following informalities: it ends with a comma (",") instead a period ("."). Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5, 7-8, 10-14, 16-20, 22-23, 25-29, 31-34, 36-37, 39-42 are rejected under 35 U.S.C. 102(e) as being anticipated by **Lipkin** (U.S. Patent 6,721,747 B2).

Regarding claim 1, **Lipkin** teaches a method for allowing a user to define and use custom metadata, the method comprising the steps of:

- a). providing a network accessible server with a metadata library comprising a plurality of metadata vocabularies (i.e., learning metadata) (col. 9, lines 40-53; col. 117, lines 54-62; Fig. 5, element 513 and 515);
- b). displaying from the server a user interface on a client computer that allows the user to specify a plurality of properties to thereby create a custom metadata vocabulary (col. 21, lines 20-31).
- c). storing the custom metadata vocabulary in the metadata library (col. 12, lines 60-64).

Regarding claims 2, 17, and 32, **Lipkin** further teaches the step of: (d) allowing the user to search the metadata library to select at least one of the metadata vocabularies to apply to an electronic resource (i.e., making catalogs available for automated search) (col. 12, lines 40-41; col. 83, lines 41-50).

Regarding claims 3, 18, and 33, **Lipkin** further teaches wherein step (a) further includes the step of:

(i) providing the server with management capabilities that allows a user to create metadata vocabularies, add references to the library to metadata vocabularies existing external to the metadata library, and set user permissions for the metadata vocabularies in the library (col. 12, line 65 – col. 13, line 4; col. 37, lines 65-66; col. 40, lines 25-52; col. 39, lines 30-35).

Regarding claims 4, 19, and 34, **Lipkin** further teaches wherein step (a) (i) further includes the step of: adding references to external metadata vocabularies by providing a universal resource indicator and name of the metadata vocabulary (col. 86, lines 9-30, col. 87, lines 25-29; col. 119, lines 61-65; col. 130, lines 10-13).

Regarding claims 5 and 20, **Lipkin** further teaches wherein step (b) further includes the step of: (i) allowing the user to specify constraints on the values the properties may have (col. 6, lines 16-19).

Regarding claims 7, 22, and 36, **Lipkin** further teaches wherein step (b) further includes the step of: (i) allowing the user to create the custom metadata vocabulary by reusing an existing metadata vocabulary (col. 21, lines 23-31 and Fig. 8c).

Regarding claims 8, 23, and 37, **Lipkin** further teaches wherein step (b)(i) further includes the step of:

- (1) allowing the user to search for the existing metadata vocabulary by entering search criteria that include vocabulary names and property names (col. 12, lines 40-41);
- (2) displaying metadata vocabularies matching the search criteria (col. 5, lines 62-64); and
- (3) allowing the user to select properties from the displayed metadata vocabularies to add to the custom metadata vocabulary (col. 21, lines 20-31; col. 6, lines 16-19).

Regarding claims 10 and 25, **Lipkin** further teaches wherein step (d) further includes the step of: allowing the user to upload the resource to the server (i.e., export) (col. 5, lines 46-53).

Regarding claims 11, 26, and 39 **Lipkin** further teaches wherein step (d) further includes the step of:

allowing the user to specify which metadata vocabularies are required to be associated with particular resource types (col. 12, lines 25-28).

Regarding claims 12, 27, and 40, **Lipkin** further teaches wherein step (d) further includes the step of:

- (i) associating user account information with the resource type and required metadata vocabulary information (col. 38, lines 14-20; col. 40, lines 25-52); and
- (ii) automatically applying required metadata vocabularies specified for the type of electronic resource when the server receives the resource by checking the user's account and retrieving the required metadata vocabularies specified for the resource type (col. 39, lines 14-20).

Regarding claims 13, 28, and 41, **Lipkin** further teaches wherein step (a) further includes the step of:

including in the vocabulary library a universal schema, shared schemas, and private schemas (i.e., model pages uses xsp directives tags defined in the tag library to include desired page content) (col. 66, lines 10-17; col. 4, lines 61-65; col. 83, lines 38-52).

Regarding claims 14, 29, and 42, **Lipkin** further teaches wherein step (a) further includes the step of:

requiring all images in the network to include metadata that is specified by the universal schema (col. 75, line 40 – col. 76, 2; col. 83, lines 38-52).

Regarding claim 16, **Lipkin** teaches a computer-readable medium containing program instructions for allowing a user to define and use custom metadata, the instructions for:

- a). providing a network accessible server with a metadata library comprising a plurality of metadata vocabularies (col. 9, lines 40-53; col. 117, lines 54-62; Fig. 5, element 513 and 515);
- b). displaying from the server a user interface on a client computer that allows the user to specify a plurality of properties to thereby create a custom metadata vocabulary (col. 21, lines 20-31), and
- c). storing the custom metadata vocabulary in the metadata library (col. 12, lines 60-64).

Regarding claim 31, **Lipkin** teaches a metadata management system, comprising:

- a). a plurality of client computers, wherein each client computer stores respective resources (Figs 3 and 4); and
- b). a server in communication with the client computers over a network, the server including
 - 1). a metadata vocabulary library containing a plurality of metadata vocabularies, each metadata vocabulary comprising a plurality of properties and

constraints on values the properties may have (col. 12, lines 32-45; col. 117, lines 54-62; and Fig. 6), and

2). a Web application for displaying browser-based forms on the client computers that allow users of the client computers to define custom metadata vocabularies for storage in the metadata vocabulary library by entering property names (col. 21, lines 20-31).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 6, 21, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lipkin** (U.S. Patent 6,721,747B2) as applied to claims 1-5, 7-8, 10-14, 16-20, 22-23, 25-29, 31-34, 36-37, 39-42 and in view of **Halstead et al.** ("Halstead") (U.S. Patent 6,502,102).

Regarding claims 6, 21, and 35, **Lipkin** does not explicitly teach wherein step (b) further includes the step of displaying a form-driven interface that includes fields for the user to enter property names and constraint values.

Halstead, however, teaches displaying a form-driven interface that includes fields for the user to enter property names and constraint values (col. 6, lines 18-26; Fig. 4 and 5).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Halstead's** teaching would have allowed **Lipkin's** to provide ease of use and an intuitive system which simplifies training and reduces learning curve as suggested by **Haswell** at col. 15, line 66 - col. 16, line 2.

7. Claims 15, 30, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lipkin** (U.S. Patent 6,721,747B2) as applied to claims 1-5, 7-8, 10-14, 16-20, 22-23, 25-29, 31-34, 36-37, 39-42 and in view of **Chau et al.** ("Chau") (US 20030014397A1).

Regarding claims 15, 30, and 43, **Lipkin** further teaches including the steps of allowing the user to assign a metadata instance to the resource by:

- a). retrieving required metadata vocabularies specified for a resource type of the resource (col. 115, lines 26-36);
- c). generating and display forms that allow the user to enter data values for the properties (col. 21, lines 20-31);
- d). validating the data values based on vocabulary constraints (col. 12, lines 52-59); and
- e). associating the data values with the resource and saving (col. 21, lines 35-54).

b). **Lipkin** does not explicitly teach merging the retrieve metadata vocabularies and removing duplicate properties.

Chau, however, teaches merging the retrieve metadata vocabularies and removing duplicate properties as XML System provides good data and metadata management solutions to handle traditional and non-traditional data. With the content of structured XML documents in a database, a user can combine structured XML information with traditional relational data and the XML System removes duplicates using XML composition stored procedures (¶s 0074 and 0733, and claim 68).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Chau's** teaching would have allowed **Lipkin's** to consolidate redundant data in an effort to save

the system resource from executing duplicate information in order to produce efficient search results.

Allowable Subject Matter

8. Claims 9, 24, and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

Prior art of record fails to teach a combination of elements including allowing the user to supply a software validator to enforce constraints beyond those supported by an underlying specification language, wherein the software validator is called when metadata associated with the vocabulary is created or changed, but after constraints enforced by the specification language have been verified as recited in dependent claims 9, 24, and 38.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Claborn et al. (U.S. Patent 6,708,186 B1)

Galeazzi et al. (U.S. Patent 6,535,868 B1)

Chu (U.S. Patent Application 20030065663A1)

Svendsen et al. (U.S. Patent 6,757,684 B2)

Morris et al. (U.S. Patent 6,629,100 B2)

Haswell et al. (U.S. Patent 6,502,102 B1)

Shaffer et al. (U.S. Patent 6,434,579 B1)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Wong whose telephone number is (703) 305-3018. The examiner can normally be reached on Monday to Friday 9:30am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Leslie Wong
Patent Examiner
Art Unit 2177

LW
August 18, 2004